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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,303	07/10/2003	Craig Hansen	43876-144	4587

7590

12/14/2004

MCDERMOTT, WILL & EMERY  
600 13th Street, N.W.  
Washington, DC 20005-3096

EXAMINER

MONESTIME, MACKLY

ART UNIT PAPER NUMBER

2676

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/616,303

Applicant(s)

HANSEN ET AL.

Examiner

Mackly Monestime

Art Unit

2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4, 6-11, 13, 16-19, 21-26 and 28 is/are allowed.
- 6) ☒ Claim(s) 5, 12, 14, 15, 20, 27, 29 and 30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/19/03; 1/15/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-30 are presented for examination.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5, 12, 14-15, 20, 27, 29 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. As per claim 5, line 1 recites the limitation of "**the validity**"; there is insufficient antecedent basis for this limitation in the claim.

5. As per claim 12, line 1 recites the limitation of "**the validity**"; there is insufficient antecedent basis for this limitation in the claim.

6. As per claim 14, line 2 recites the limitation of "**the extracted data**"; line 4 recites the limitation "**the most significant bit**"; line 5 recites the limitation "**the position**"; there is insufficient antecedent basis for these limitations in the claim.

7. As per claim 15, line 3 recites the limitation of "**the contents**"; there is insufficient antecedent basis for this limitation in the claim.

8. As per claim 20, line 2 recites the limitation of "**the validity**"; there is insufficient antecedent basis for this limitation in the claim.

9. As per claim 27, line 2 recites the limitation of "**the validity**"; there is insufficient antecedent basis for this limitation in the claim.

10. As per claim 29, line 2 recites the limitation of “**the extracted data**”; line 4 recites the limitation “**the most significant bit**”; line 5 recites the limitation “**the position**”; there is insufficient antecedent basis for these limitations in the claim.

11. As per claim 30, line 4 recites the limitation of “**the contents**”; there is insufficient antecedent basis for this limitation in the claim.

***Allowable Subject Matter***

12. Claim 1-4, 6-11, 13, 16-19, 21-26 and 28 allowable over the prior art of record.

13. Claim 5, 12, 14-15, 20, 27, 29 and 30 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

14. The prior art of record fail to teach or suggest individually or in combination a system a method of performing a computation in a programmable processor, the programmable processor having a first memory system having a first data path width, and a second memory system and a third memory system each of the second memory system and the third memory system having a data path width which is greater than the first data path width. Each independent claim identifies the uniquely distinct features: “copying two memory operands portion from one memory system to another system, and forming first catenated data and second catenated data and performing a computation of a single instruction using the first catenated data and the second catenated data (as per claims 1, 8, 16 and 23). The above limitations of the present

claims invention have not found to be anticipated, suggested or made obvious by the prior art of record, either singularly or in combination.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gafken (US Patent No. 5,778, 412) taught a method and apparatus for interfacing a data bus to a plurality of memory devices.

Furuhashi (US Patent No. 6,567,908) taught a method and apparatus for memory allocation.

Tabata et al (US Patent No. 4,658,349) taught a direct memory access control circuit and data processing system using said circuit.

Yamamoto et al (US Patent No. 6,453,368) taught adding a dummy data or discarding a portion of data in a bus repeater buffer memory for a second data transfer to a second bus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mackly Monestime whose telephone number is (703) 305-3855. The examiner can normally be reached on Monday to Thursday from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bella Matthew, can be reached on (703) 308-6829.

**Any response to this action should be mailed to:**

Application/Control Number: 10/616,303  
Art Unit: 2676

Page 5

Commissioner of Patent and Trademarks

Washington, D.C. 20231

or faxed to:

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,

Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Mackly Monesime

Patent Examiner

December 8, 2004



MATTHEW C. BELLA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600